

# FIFTH ANNUAL REPORT

by

D. HILL

Research Professor of Geology

## A. PERSONAL RESEARCH

(a) Corals. My research on Palaeozoic corals has been concentrated on:

- (1) The Rugose Coral family Entelophyllum<sup>idae</sup>, its distribution, origin and evolution.
- (2) The Devonian Rugose and Tabulate corals of the Kimberleys, Western Australia.
- (3) Preparation of a supplement to the Rugosa and Tabulata sections of the Anglo-American Treatise on Invertebrate Paleontology (R.C. Moore, Ed.).

(b) Geology of Queensland. Four weeks were spent in the field with the mapping parties of the Bureau of Mineral Resources and the Geological Survey of Queensland, and determinative work on corals for this programme continued. Determinations of corals were again made for companies engaged in exploration for petroleum and gas.

(c) Index Fossils of Queensland. The second part, "The Carboniferous Fossils of Queensland" has now been published (D. Hill and J.T. Woods, Eds.) and a third "The Triassic Fossils of Queensland" is in preparation.

## B. POST-DOCTORAL RESEARCH VISITORS

Professor P.K. Sutherland, of the University of Oklahoma, spent seven weeks of his sabbatical leave studying our coral collections and preparing, jointly with me, a paper on the Silurian Rugose coral genus Entelophyllum.

Dr. G.K. Webers of the University of Minnesota spent five weeks here studying our collection of books and papers on Archaeocyatha and receiving from me an introduction to the study of this phylum.

Dr. D. Strusz of the University College of Townsville and Mr. A. Wright of the University of Sydney spent two weeks and one week here respectively, studying our coral collections and my collection of coral literature and consulting me on problems met in their coral studies.



### C. INTRAMURAL GRADUATE RESEARCH IN PALAEOLOGY AND STRATIGRAPHY

J.S. Jell and R.K. Jull, Ph.D. candidates have continued to make satisfactory studies of Palaeozoic corals.

B. Runnegar, Ph.D. candidate, is doing work of high quality on Permian mollusca.

C. Mallett, M.Sc. candidate, has pursued part-time studies on stromatoporoids.

C. Brown, Honours student, obtained second class Honours, Division one, with a thesis on the geology of an area north west of Gympie and a study of Permian brachiopods.

Two other students, in micropalaeontology, were supervised by Dr. G. Playford, who has continued his own very precise researches in palynology.

### D. LECTURES

During 1964 I gave 3 lectures per week (2 to graduate and 1 to undergraduate students).

### E. THE FUTURE

The Head of the Department (Professor A.F. Wilson) has made provision in the departmental research grant for a senior research assistant to assist in my work and I look forward to accelerated achievement.

### F. PUBLICATIONS

HILL, D. Archaeocyatha from the Shackleton Limestone of the Ross System, Nimrod Glacier area, Antarctica. Trans. roy. Soc. N.Z. (Geol.), 2, pp. 137-46, pls. 1,2, 1964.

HILL, D. The Phylum Archaeocyatha. Biol. Rev., 39, pp.232-58, Pl.1, May, 1964.

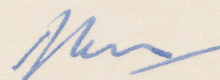
HILL, D. Archaeocyatha from Antarctica and a Review of the Phylum. Trans. Antarct. Exped. 1955-1958. Sci. Rep. 10, pp. 1 - 151, pls. 1-12, Feb., 1965.



3.

HILL, D. and WOODS, J.T. (Eds.) Permian Index Fossils of Queensland. Qld Palaeontogr. Soc. Brisbane, 32 pp., 15 pls. Jan. 1964.

HILL, D. and WOODS, J.T. Carboniferous Fossils of Queensland. Qld. Palaeontogr. Soc., Brisbane. 32 pp., 15 pls.

  
\_\_\_\_\_  
Dorothy Hill

2nd March, 1965

DOROTHY HILL COLLECTION